

TRANSMITTAL OF APPEAL BRIEFDocket No. (Optional): **A-4251 (191930-1050)**

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September 11, 2006
Signature - Brooke FrenchIn re Application of
Smith, et alApplication Number
08/990,973Filed
December 15, 1997For
Interactive Subscription Television TerminalGroup Art Unit
2623Examiner
Salce, Jason P.Confirmation No.:
1916

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on May 30, 2006

The fee for this Appeal Brief is (37 CFR 1.17(c))

\$ 500.00

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.17(a)-(d) apply.



(a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d) for the total number of months checked below:



One month (37 CFR 1.17(a)(1))

\$ 120.00



Two months (37 CFR 1.17(a)(2))

\$ 430.00



Three months (37 CFR 1.17(a)(3))

\$ 980.00



Four months (37 CFR 1.17(a)(4))

\$ 1530.00



The extension fee has already been filed in this application.



(b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that the applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Method of Payment:

Payment is enclosed as follows:



A check in the amount of _____ enclosed.



Payment by credit card. Form PTO-2038 is attached in the amount of \$620.00

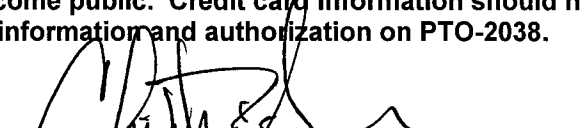


The Commissioner is authorized to charge _____ to a Deposit Account



The Commissioner is hereby authorized to charge any deficiencies in fees, or credit any overpayment to Deposit Account No. 20-0778. A duplicate copy is enclosed.

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9/11/2006
Date
Christopher D. Guind, Reg. No. 54,142

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES**

In Re Application of:

Smith, et al.

Serial No.: 08/990,973

Filed: December 15, 1997

For: Interactive Subscription Television Terminal

Confirmation No.: 1916

Group Art Unit: 2623

Examiner: Salce, Jason P.

Docket No.: A-4251 (191930-1050)

APPEAL BRIEF UNDER 37 C.F.R. §1.192

Mail Stop Appeal Brief - Patents
Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

This is an appeal from the decision of Examiner Jason Salce, Group Art Unit 2623, mailed December 28, 2005, rejecting all claims 27-54 in the present application and making the rejection FINAL.

I. REAL PARTY IN INTEREST

The real party in interest of the instant application is Scientific-Atlanta, Inc., having its principal place of business at 5030 Sugarloaf Parkway, Lawrenceville, GA 30044. Scientific-Atlanta, Inc., the assignee of record, is wholly owned by Cisco Systems, Inc.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

III. STATUS OF THE CLAIMS

The Office Action has rejected all claims 27-54, and Applicant hereby appeals the rejection to all claims (27-54). Claims 1-26 were canceled and claims 27-54 were added during prosecution. Claims 27-54 remain pending. Claims 27-32 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over *Welsh* (U.S. Patent No. 4,829,558) in view of *Reiter, et al* (U.S. Patent No. 4,751,578) in further view of *Boulton* (U.S. Patent No. 4,985,697). Claims 33, 39-40, and 43 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over *Welsh* (U.S. Patent No. 4,829,558) in view of *Kirschner, et al* (U.S. Patent No. 4,253,157) in further view of *Boulton* (U.S. Patent No. 4,985,697). Claim 46 is rejected under 35 U.S.C. 104(a) as allegedly being unpatentable over *Welsh* (U.S. Patent No. 4,829,558) in view of *Kirschner, et al* (U.S. Patent No. 4,253,157) in further view of *Boulton* (U.S. Patent No. 4,985,697) in further view of *Reiter, et al* (U.S. Patent No. 4,751,578). Claims 34-36, 38, 41, 44-45, and 47-52 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over *Welsh* (U.S. Patent No. 4,829,558) in view of *Kirschner, et al* (U.S. Patent No. 4,253,157) in further view of *Boulton* (U.S. Patent No. 4,985,697) in further view of *Iwashita* (U.S. Patent No. 4,928,168). Claims 37 and 42 are rejected under 35 U.S.C. as allegedly being unpatentable over *Welsh* (U.S. Patent No. 4,829,558) in view of *Kirschner, et al* (U.S. Patent No. 4,253,157) in further view of *Boulton* (U.S. Patent No. 4,985,697) in further view of *Couch, et al* (U.S. Patent No. 4,752,876). Claims 53-54 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over *Welsh* (U.S. Patent No. 4,829,558) in view of *Boulton* (U.S. Patent No. 4,985,697). Applicant traverses these rejections and respectfully submits that the rejections of record are clearly not proper.

IV. STATUS OF AMENDMENTS

No amendments have been made or requested since the mailing of the FINAL Office Action and all amendments submitted prior to the FINAL action have been entered. A copy of the current claims is attached hereto in the Claims-Appendix in §VIII.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Claim 27 recites a method for use in an interactive television system, the interactive television system including a system manager coupled to a plurality of subscriber terminals, comprising the steps of: receiving a first user input at a subscriber terminal indicating a choice for one of a video signal and first operation data, wherein the first operation data includes a plurality of screens; generating a screen of first operation data responsive to a command, wherein the screen of operation data is generated by a local screen character generator; saving a screen of the plurality of screens to memory; determining whether the screen of the plurality of screens saved into memory is directly accessible or accessible only through other screens; if the screen of the plurality of screens saved into memory is only accessible through other screens, indicating that the screen of the plurality of screens saved into memory is not to be deleted from memory; and displaying at least one of the video signal and the screen of the first operation data according to the user input, wherein the first operation data is stored in at least one of a screen generator coupled to the system manager and subscriber terminal memory.

This claim terminology may be understood with reference, for example, to pp. 13-14 of the specification.

Claim 31 recites a local environment for providing interactive communications, the local environment comprising: a system manager for storing information regarding a plurality of clients, each client associated with a terminal located in the local environment; a local screen generator for generating a screen of information responsive to receiving a command; memory for saving the screen of information; and a plurality of terminals coupled to the system manager, each terminal for receiving at least one of a video signal and first operation data, wherein when the first operation data is chosen, the terminal displays a feature start screen and the video signal and stores a plurality of screens associated with the first operation data; wherein the system manager is configured to save the screen into memory and to determine whether the screen of information is directly accessible or accessible only through other screens; and wherein the system manager is further configured to indicate that the screen of information saved into memory is not to be deleted from memory if the screen of information saved into memory is only accessible through other screens.

This claim terminology may be understood with reference, for example, to pp. 13-14 of the specification.

Claim 33 recites a method of providing services to a patron of a subscriber of an interactive entertainment system, the method comprising the steps of: generating at the premises of a subscriber a screen of a menu for selecting services, wherein the screen is one of a plurality of screens included in the menu, and wherein the services for selection are offered by at least one of the group consisting of an interactive entertainment system and a subscriber of the interactive entertainment system; providing a terminal, the terminal adapted to receiver input from a guest and adapted to provide the screen to a display device; instructing the terminal to save the screen of the plurality of screens to memory; determining whether the screen of the plurality of screens saved into memory is directly accessible or accessible only through other screens; if the screen of the plurality of screens saved into memory is only accessible through other screens, instructing the terminal to indicate that the screen of the plurality of screens saved into memory is not to be deleted from memory; and receiving a selection from a guest.”

This claim terminology may be understood with reference, for example, to pp. 13-14 of the specification.

Claim 47 recites a system for providing services to guests of a subscriber of an interactive entertainment system, the system comprising: means for receiving content provided by the interactive entertainment system; means for distributing the received content to terminals located at the premises of the subscriber; means for generating screens of a menu for selecting services, wherein the menu includes a plurality of screens, and the services offered in the menu include services of the interactive entertainment system and services of the subscriber, wherein the screen generating means is located at the premises of the subscriber; and means for instructing the screen generating means to save a screen of the plurality of screens to memory; means for determining whether the screen of the plurality of screens saved into memory is directly accessible or accessible only through other screens; means for instructing the terminal such that, if the screen of the plurality of screens saved into memory is

only accessible through other screens, the terminal indicates that the screen of the plurality of screens saved into memory is not to be deleted from memory; means for receiving a request for a service by a guest; and means for managing the system, the managing means including means for billing the guest for selected services.

This claim terminology may be understood with reference, for example, to pp. 13-14 of the specification.

Claim 53 recites a method of providing services to guests of a subscriber of an interactive entertainment system, the method comprising the steps of: providing a plurality of two-way terminals; generating at the premises of a subscriber a screen for display on a television, wherein the screen relates to information about services provided by the subscriber of the interactive entertainment system; saving the screen to memory on one of the plurality of two-way terminals; determining whether the screen saved into memory is directly accessible or accessible only through other screens; if the screen saved into memory is only accessible through other screens, indicating that the screen of the plurality of screens saved into memory is not to be deleted from memory; and receiving a selection from a guest.”

This claim terminology may be understood with reference, for example, to pp. 13-14 of the specification.

Claim 54 recites a system for providing services to guests of a subscriber of an interactive entertainment system, the system comprising: means for receiving content provided by the interactive entertainment system; means for distributing the received content to terminals located at the premises of the subscriber; means for generating screens of information related to services provided by the subscriber of the interactive entertainment system; means for saving the screens to memory on a terminal located at the premises of a subscriber; means for determining whether the screen saved into memory is directly accessible or accessible only through other screens; means for indicating that, if the screen saved into memory is only accessible through other screens, the screen saved into memory is not to be deleted from memory; and means for receiving a request for a service by a guest.

This claim terminology may be understood with reference, for example, to pp. 13-14 of the specification.

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Independent claims 27 and 31 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over *Welsh* (U.S. Patent No. 4,829,558) in view of *Reiter, et al* (U.S. Patent No. 4,751,578) in further view of *Boulton* (U.S. Patent No. 4,985,697). Independent claim 33 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over *Welsh* (U.S. Patent No. 4,829,558) in view of *Kirschner, et al* (U.S. Patent No. 4,253,157) in further view of *Boulton* (U.S. Patent No. 4,985,697). Independent claim 47 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over *Welsh* (U.S. Patent No. 4,829,558) in view of *Kirschner, et al* (U.S. Patent No. 4,253,157) in further view of *Boulton* (U.S. Patent No. 4,985,697) in further view of *Iwashita* (U.S. Patent No. 4,928,168). Independent claims 53 and 54 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over *Welsh* (U.S. Patent No. 4,829,558) in view of *Boulton* (U.S. Patent No. 4,985,697).

VII. ARGUMENT

A. Independent Claim 27

i. Response to Rejection in Final Office Action of December 28, 2005

Specifically, Applicant submits that the following clear legal deficiency exists in the rejection.

Independent claim 27 recites:

27. A method for use in an interactive television system, the interactive television system including a system manager coupled to a plurality of subscriber terminals, comprising the steps of:

receiving a first user input at a subscriber terminal indicating a choice for one of a video signal and first operation data, wherein the first operation data includes a plurality of screens;

generating a screen of first operation data responsive to a command, wherein the screen of operation data is generated by a local screen character generator;

saving a screen of the plurality of screens to memory;

determining whether the screen of the plurality of screens saved into memory is directly accessible or accessible only through other screens;

if the screen of the plurality of screens saved into memory is only accessible through other screens, indicating that the screen of the plurality of screens saved into memory is not to be deleted from memory; and

displaying at least one of the video signal and the screen of the first operation data according to the user input, wherein the first operation data is stored in at least one of a screen generator coupled to the system manager and subscriber terminal memory.

(Emphasis added). Applicant respectfully submits that claim 27 patently defines over the cited art for at least the reason that the cited art does not disclose the features emphasized above.

Applicant respectfully submits that a claimed element, specifically among others, “**if the screen of the plurality of screens saved into memory is only accessible through other screens, indicating that the screen of the plurality of screens saved into memory is not to be deleted from memory,**” of claim 27 is not taught by the references of record either singularly or in combination. The Office Action alleges that *Boulton* teaches the cited element:

Welsh ... does not teach the memory management method of determining if a screen is part of a group of screens, and only saving the group of screens in RAM so that they may be directly accessed instead of continuously downloading the screens from a remote system.

Boulton discloses receiving screen data and continuously updating memory depending on the position of the current page being read, where the memory is capable of storing 10-30 pages that are linked to 3-10 pages that have already been viewed (see Column 7, Lines 8-12), thereby teaching that if the screen of the plurality of screens saved into memory is only accessible through other screens, instructing the terminal to indicate that the screen of the plurality of screens saved into memory is not to be deleted from memory.

See Final Office Action, pp. 4-5.

However, Applicant respectfully submits that *Boulton* **fails** to teach the claimed element.

In *Boulton*, an electronic book publishing method is disclosed.

A number of page equivalents are ... transferred to RAM for presentation to the user. Preferably, the RAM is continually updating depending upon the position in a presentation so that 10-30 page-equivalents of subsequent text are available along with 3-10 pages of text already viewed. A lesser number of pages of additional modalities are stored to maximize the use of RAM. Thus, a user can advance a great distance in the presentation for material already stored in RAM and can backtrack *to some degree* while also being able to switch to different modalities. ***The further a modality is from the current reference, the less likely a switch will be made as quickly, and thus the less need to store as many page equivalents.***

(Emphasis added). See *Boulton*, Col. 7, lines 6-13.

Even if, arguendo, *Boulton* teaches an electronic system that deletes a screen based on a distance from the present screen, pages are only saved if they are close to the present page. The electronic system disclosed in *Boulton* determines that more recent pages are more likely to be accessed, so it only keeps in RAM those pages likely to be accessed (10-30 page-equivalents of subsequent text are available along with 3-10 pages of text already viewed).

If a reader using the system of *Boulton* is on page 350, for example, and wants to access page 4, the system of *Boulton* will not have indicated that page 4, a page that is not directly accessible, is not to be deleted from memory. According to *Boulton*, when a reader is on page 350, page 4 will have been deleted to maximize the use of RAM. In *Boulton*, to access page 4 from page 350, the reader will have to page back through several hundred pages to get to the desired page. Even if, arguendo, *Boulton* teaches determining which pages to delete based on the distance from the present page, it fails to teach making the determination based on whether the screen is accessible only through other screens.

However, using the method of claim 27, since page 4 is not directly accessible, and is only accessible through other screens, page 4 will be have an indication that it is not to be deleted from memory. Therefore, Applicant challenges the Examiner's statement that *Boulton* discloses

the claimed element. No other cited reference cures this deficiency. As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 27, the rejection should be overturned and the claim allowed.

ii. Response to Advisory Action of December 28, 2005

The Advisory Action alleges that “[a]s stated on Page 8 of the previous Office Action, Welsh is used to teach this limitation, not Boulton.” *See Advisory Action*, p. 2. However, Applicant respectfully submits that the previous Office Action uses *Boulton* to allegedly teach this limitation. *See Office Action*, pp. 4-5, 9, and 16. Additionally, Examiner has not indicated where the cited limitation is disclosed in *Welsh*. Nevertheless, Applicant respectfully submits that *Welsh* also fails to disclose the cited element. *Welsh* fails to teach saving a screen to memory based on a determination of whether the screen is accessible only through other screens. Applicant respectfully submits that, for at least this reason, the sustained rejection of claim 27 is improper and should be overturned.

B. Independent Claim 31

i. Response to Rejection in Final Office Action of December 28, 2005

Specifically, Applicant submits that the following clear legal deficiency exists in the rejection.

Independent claim 31 recites:

31. A method of providing services to a patron of a subscriber of an interactive entertainment system, the method comprising the steps of:

generating at the premises of a subscriber a screen of a menu for selecting services, wherein the screen is one of a plurality of screens included in the menu, and wherein the services for selection are offered by at least one of the group consisting of an interactive entertainment system and a subscriber of the interactive entertainment system;

providing a terminal, the terminal adapted to receiver input from a guest and adapted to provide the screen to a display device;

instructing the terminal to save the screen of the plurality of screens to memory;
determining whether the screen of the plurality of screens saved into memory is directly accessible or accessible only through other screens;

if the screen of the plurality of screens saved into memory is only accessible through

other screens, instructing the terminal to indicate that the screen of the plurality of screens saved into memory is not to be deleted from memory; and
receiving a selection from a guest.

(Emphasis added). Applicant respectfully submits that claim 31 patentably defines over the cited art for at least the reason that the cited art does not disclose the features emphasized above.

Applicant respectfully submits that a claimed element, specifically among others, “**if the screen of the plurality of screens saved into memory is only accessible through other screens, instructing the terminal to indicate that the screen of the plurality of screens saved into memory is not to be deleted from memory,**” of claim 31 is not taught by the references of record either singularly or in combination. The Office Action alleges that *Boulton* teaches the cited element:

Welsh ... does not teach the memory management method of determining if a screen is part of a group of screens, and only saving the group of screens in RAM so that they may be directly accessed instead of continuously downloading the screens from a remote system.

Boulton discloses receiving screen data and continuously updating memory depending on the position of the current page being read, where the memory is capable of storing 10-30 pages that are linked to 3-10 pages that have already been viewed (see Column 7, Lines 8-12), thereby teaching that if the screen of the plurality of screens saved into memory is only accessible through other screens, instructing the terminal to indicate that the screen of the plurality of screens saved into memory is not to be deleted from memory.

See Final Office Action, pp. 4-5.

However, Applicant respectfully submits that *Boulton* **fails** to teach the claimed element. In *Boulton*, an electronic book publishing method is disclosed.

A number of page equivalents are ... transferred to RAM for

presentation to the user. Preferably, the RAM is continually updating depending upon the position in a presentation so that 10-30 page-equivalents of subsequent text are available along with 3-10 pages of text already viewed. A lesser number of pages of additional modalities are stored to maximize the use of RAM. Thus, a user can advance a great distance in the presentation for material already stored in RAM and can backtrack *to some degree* while also being able to switch to different modalities. ***The further a modality is from the current reference, the less likely a switch will be made as quickly, and thus the less need to store as many page equivalents.***

(Emphasis added). See *Boulton*, Col. 7, lines 6-13.

Even if, arguendo, *Boulton* teaches an electronic system that deletes a screen based on a distance from the present screen, pages are only saved if they are close to the present page. The electronic system disclosed in *Boulton* determines that more recent pages are more likely to be accessed, so it only keeps in RAM those pages likely to be accessed (10-30 page-equivalents of subsequent text are available along with 3-10 pages of text already viewed).

If a reader using the system of *Boulton* is on page 350, for example, and wants to access page 4, the system of *Boulton* will not have indicated that page 4, a page that is not directly accessible, is not to be deleted from memory. According to *Boulton*, when a reader is on page 350, page 4 will have been deleted to maximize the use of RAM. In *Boulton*, to access page 4 from page 350, the reader will have to page back through several hundred pages to get to the desired page. Even if, arguendo, *Boulton* teaches determining which pages to delete based on the distance from the present page, it fails to teach making the determination based on whether the screen is accessible only through other screens.

However, using the method of claim 31, since page 4 is not directly accessible, and is only accessible through other screens, page 4 will be have an indication that it is not to be deleted from memory. Therefore, Applicant challenges the Examiner's statement that *Boulton* discloses the claimed element. No other cited reference cures this deficiency. As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of

claim 31, the rejection should be overturned and the claim allowed.

ii. Response to Advisory Action of December 28, 2005

The Advisory Action alleges that “[a]s stated on Page 8 of the previous Office Action, Welsh is used to teach this limitation, not Boulton.” See *Advisory Action*, p. 2. However, Applicant respectfully submits that the previous Office Action uses *Boulton* to allegedly teach this limitation. See *Office Action*, pp. 4-5, 9, and 16. Additionally, Examiner has not indicated where the cited limitation is disclosed in *Welsh*. Nevertheless, Applicant respectfully submits that *Welsh* also fails to disclose the cited element. *Welsh* fails to teach saving a screen to memory based on a determination of whether the screen is accessible only through other screens. Applicant respectfully submits that, for at least this reason, the sustained rejection of claim 31 is improper and should be overturned.

C. Independent Claim 33

i. Response to Rejection in Final Office Action of December 28, 2005

Specifically, Applicant submits that the following clear legal deficiency exists in the rejection.

Independent claim 33 recites:

33. A method of providing services to a patron of a subscriber of an interactive entertainment system, the method comprising the steps of:

generating at the premises of a subscriber a screen of a menu for selecting services, wherein the screen is one of a plurality of screens included in the menu, and wherein the services for selection are offered by at least one of the group consisting of an interactive entertainment system and a subscriber of the interactive entertainment system;

providing a terminal, the terminal adapted to receiver input from a guest and adapted to provide the screen to a display device;

instructing the terminal to save the screen of the plurality of screens to memory;

determining whether the screen of the plurality of screens saved into memory is directly accessible or accessible only through other screens;

if the screen of the plurality of screens saved into memory is only accessible through other screens, instructing the terminal to indicate that the screen of the plurality of screens saved into memory is not to be deleted from memory; and

receiving a selection from a guest.

(Emphasis added). Applicant respectfully submits that claim 33 patently defines over the cited art for at least the reason that the cited art does not disclose the features emphasized above.

Applicant respectfully submits that a claimed element, specifically among others, **“if the screen of the plurality of screens saved into memory is only accessible through other screens, instructing the terminal to indicate that the screen of the plurality of screens saved into memory is not to be deleted from memory,”** of claim 33 is not taught by the references of record either singularly or in combination. The Office Action alleges that *Boulton* teaches the cited element:

Welsh ... does not teach the memory management method of determining if a screen is part of a group of screens, and only saving the group of screens in RAM so that they may be directly accessed instead of continuously downloading the screens from a remote system.

Boulton discloses receiving screen data and continuously updating memory depending on the position of the current page being read, where the memory is capable of storing 10-30 pages that are linked to 3-10 pages that have already been viewed (see Column 7, Lines 8-12), thereby teaching that if the screen of the plurality of screens saved into memory is only accessible through other screens, instructing the terminal to indicate that the screen of the plurality of screens saved into memory is not to be deleted from memory.

See Final Office Action, pp. 4-5.

However, Applicant respectfully submits that *Boulton* **fails** to teach the claimed element. In *Boulton*, an electronic book publishing method is disclosed.

A number of page equivalents are ... transferred to RAM for presentation to the user. Preferably, the RAM is continually updating depending upon the position in a presentation so that 10-30 page-equivalents of subsequent text are available along with 3-

10 pages of text already viewed. A lesser number of pages of additional modalities are stored to maximize the use of RAM. Thus, a user can advance a great distance in the presentation for material already stored in RAM and can backtrack *to some degree* while also being able to switch to different modalities. ***The further a modality is from the current reference, the less likely a switch will be made as quickly, and thus the less need to store as many page equivalents.***

(Emphasis added). See *Boulton*, Col. 7, lines 6-13.

Even if, arguendo, *Boulton* teaches an electronic system that deletes a screen based on a distance from the present screen, pages are only saved if they are close to the present page. The electronic system disclosed in *Boulton* determines that more recent pages are more likely to be accessed, so it only keeps in RAM those pages likely to be accessed (10-30 page-equivalents of subsequent text are available along with 3-10 pages of text already viewed).

If a reader using the system of *Boulton* is on page 350, for example, and wants to access page 4, the system of *Boulton* will not have indicated that page 4, a page that is not directly accessible, is not to be deleted from memory. According to *Boulton*, when a reader is on page 350, page 4 will have been deleted to maximize the use of RAM. In *Boulton*, to access page 4 from page 350, the reader will have to page back through several hundred pages to get to the desired page. Even if, arguendo, *Boulton* teaches determining which pages to delete based on the distance from the present page, it fails to teach making the determination based on whether the screen is accessible only through other screens.

However, using the method of claim 33, since page 4 is not directly accessible, and is only accessible through other screens, page 4 will be have an indication that it is not to be deleted from memory. Therefore, Applicant challenges the Examiner's statement that *Boulton* discloses the claimed element. No other cited reference cures this deficiency. As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 33, the rejection should be overturned and the claim allowed.

ii. Response to Advisory Action of December 28, 2005

The Advisory Action alleges that “[a]s stated on Page 8 of the previous Office Action, Welsh is used to teach this limitation, not Boulton.” See *Advisory Action*, p. 2. However, Applicant respectfully submits that the previous Office Action uses *Boulton* to allegedly teach this limitation. See *Office Action*, pp. 4-5, 9, and 16. Additionally, Examiner has not indicated where the cited limitation is disclosed in *Welsh*. Nevertheless, Applicant respectfully submits that *Welsh* also fails to disclose the cited element. *Welsh* fails to teach saving a screen to memory based on a determination of whether the screen is accessible only through other screens. Applicant respectfully submits that, for at least this reason, the sustained rejection of claim 33 is improper and should be overturned.

D. Independent Claim 47

i. Response to Rejection in Final Office Action of December 28, 2005

Specifically, Applicant submits that the following clear legal deficiency exists in the rejection.

Independent claim 47 recites:

47. A system for providing services to guests of a subscriber of an interactive entertainment system, the system comprising:
means for receiving content provided by the interactive entertainment system;
means for distributing the received content to terminals located at the premises of the subscriber;
means for generating screens of a menu for selecting services, wherein the menu includes a plurality of screens, and the services offered in the menu include services of the interactive entertainment system and services of the subscriber, wherein the screen generating means is located at the premises of the subscriber; and
means for instructing the screen generating means to save a screen of the plurality of screens to memory;
means for determining whether the screen of the plurality of screens saved into memory is directly accessible or accessible only through other screens;
means for instructing the terminal such that, if the screen of the plurality of screens saved into memory is only accessible through other screens, the terminal indicates that the screen of the plurality of screens saved into memory is not to be deleted from memory;
means for receiving a request for a service by a guest; and
means for managing the system, the managing means including means for billing the guest for selected services.

(Emphasis added). Applicant respectfully submits that claim 47 patently defines over the cited art for at least the reason that the cited art does not disclose the features emphasized above.

Applicant respectfully submits that a claimed element, specifically among others, “**means for instructing the terminal such that, if the screen of the plurality of screens saved into memory is only accessible through other screens, the terminal indicates that the screen of the plurality of screens saved into memory is not to be deleted from memory,**” of claim 47 is not taught by the references of record either singularly or in combination. The Office Action alleges that *Boulton* teaches the cited element:

Welsh ... does not teach the memory management method of determining if a screen is part of a group of screens, and only saving the group of screens in RAM so that they may be directly accessed instead of continuously downloading the screens from a remote system.

Boulton discloses receiving screen data and continuously updating memory depending on the position of the current page being read, where the memory is capable of storing 10-30 pages that are linked to 3-10 pages that have already been viewed (see Column 7, Lines 8-12), thereby teaching that if the screen of the plurality of screens saved into memory is only accessible through other screens, instructing the terminal to indicate that the screen of the plurality of screens saved into memory is not to be deleted from memory.

See *Final Office Action*, pp. 4-5.

However, Applicant respectfully submits that *Boulton* **fails** to teach the claimed element. In *Boulton*, an electronic book publishing method is disclosed.

A number of page equivalents are ... transferred to RAM for presentation to the user. Preferably, the RAM is continually updating depending upon the position in a presentation so that 10-

30 page-equivalents of subsequent text are available along with 3-10 pages of text already viewed. A lesser number of pages of additional modalities are stored to maximize the use of RAM. Thus, a user can advance a great distance in the presentation for material already stored in RAM and can backtrack *to some degree* while also being able to switch to different modalities. ***The further a modality is from the current reference, the less likely a switch will be made as quickly, and thus the less need to store as many page equivalents.***

(Emphasis added). See *Boulton*, Col. 7, lines 6-13.

Even if, arguendo, *Boulton* teaches an electronic system that deletes a screen based on a distance from the present screen, pages are only saved if they are close to the present page. The electronic system disclosed in *Boulton* determines that more recent pages are more likely to be accessed, so it only keeps in RAM those pages likely to be accessed (10-30 page-equivalents of subsequent text are available along with 3-10 pages of text already viewed).

If a reader using the system of *Boulton* is on page 350, for example, and wants to access page 4, the system of *Boulton* will not have indicated that page 4, a page that is not directly accessible, is not to be deleted from memory. According to *Boulton*, when a reader is on page 350, page 4 will have been deleted to maximize the use of RAM. In *Boulton*, to access page 4 from page 350, the reader will have to page back through several hundred pages to get to the desired page. Even if, arguendo, *Boulton* teaches determining which pages to delete based on the distance from the present page, it fails to teach making the determination based on whether the screen is accessible only through other screens.

However, using the system of claim 47, since page 4 is not directly accessible, and is only accessible through other screens, page 4 will be have an indication that it is not to be deleted from memory. Therefore, Applicant challenges the Examiner's statement that *Boulton* discloses the claimed element. No other cited reference cures this deficiency. As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 47, the rejection should be overturned and the claim allowed.

ii. **Response to Advisory Action of December 28, 2005**

The Advisory Action alleges that “[a]s stated on Page 8 of the previous Office Action, Welsh is used to teach this limitation, not Boulton.” *See Advisory Action*, p. 2. However, Applicant respectfully submits that the previous Office Action uses *Boulton* to allegedly teach this limitation. *See Office Action*, pp. 4-5, 9, and 16. Additionally, Examiner has not indicated where the cited limitation is disclosed in *Welsh*. Nevertheless, Applicant respectfully submits that *Welsh* also fails to disclose the cited element. *Welsh* fails to teach saving a screen to memory based on a determination of whether the screen is accessible only through other screens. Applicant respectfully submits that, for at least this reason, the sustained rejection of claim 47 is improper and should be overturned.

E. **Independent Claim 53**

i. **Response to Rejection in Final Office Action of December 28, 2005**

Specifically, Applicant submits that the following clear legal deficiency exists in the rejection.

Independent claim 53 recites:

53. A method of providing services to guests of a subscriber of an interactive entertainment system, the method comprising the steps of:
providing a plurality of two-way terminals;
generating at the premises of a subscriber a screen for display on a television, wherein the screen relates to information about services provided by the subscriber of the interactive entertainment system;
saving the screen to memory on one of the plurality of two-way terminals;
determining whether the screen saved into memory is directly accessible or accessible only through other screens;
if the screen saved into memory is only accessible through other screens, indicating that the screen of the plurality of screens saved into memory is not to be deleted from memory; and
receiving a selection from a guest.

(Emphasis added). Applicant respectfully submits that claim 53 patently defines over the cited art for at least the reason that the cited art does not disclose the features emphasized above.

Applicant respectfully submits that a claimed element, specifically among others, **“if the screen saved into memory is only accessible through other screens, indicating that the**

screen of the plurality of screens saved into memory is not to be deleted from memory,” of claim 53 is not taught by the references of record either singularly or in combination. The Office Action alleges that *Boulton* teaches the cited element:

Welsh ... does not teach the memory management method of determining if a screen is part of a group of screens, and only saving the group of screens in RAM so that they may be directly accessed instead of continuously downloading the screens from a remote system.

Boulton discloses receiving screen data and continuously updating memory depending on the position of the current page being read, where the memory is capable of storing 10-30 pages that are linked to 3-10 pages that have already been viewed (see Column 7, Lines 8-12), thereby teaching that if the screen of the plurality of screens saved into memory is only accessible through other screens, instructing the terminal to indicate that the screen of the plurality of screens saved into memory is not to be deleted from memory.

See Final Office Action, pp. 4-5.

However, Applicant respectfully submits that *Boulton* **fails** to teach the claimed element. In *Boulton*, an electronic book publishing method is disclosed.

A number of page equivalents are ... transferred to RAM for presentation to the user. Preferably, the RAM is continually updating depending upon the position in a presentation so that 10-30 page-equivalents of subsequent text are available along with 3-10 pages of text already viewed. A lesser number of pages of additional modalities are stored to maximize the use of RAM. Thus, a user can advance a great distance in the presentation for material already stored in RAM and can backtrack *to some degree* while also being able to switch to different modalities. *The further*

a modality is from the current reference, the less likely a switch will be made as quickly, and thus the less need to store as many page equivalents.

(Emphasis added). See *Boulton*, Col. 7, lines 6-13.

Even if, arguendo, *Boulton* teaches an electronic system that deletes a screen based on a distance from the present screen, pages are only saved if they are close to the present page. The electronic system disclosed in *Boulton* determines that more recent pages are more likely to be accessed, so it only keeps in RAM those pages likely to be accessed (10-30 page-equivalents of subsequent text are available along with 3-10 pages of text already viewed).

If a reader using the system of *Boulton* is on page 350, for example, and wants to access page 4, the system of *Boulton* will not have indicated that page 4, a page that is not directly accessible, is not to be deleted from memory. According to *Boulton*, when a reader is on page 350, page 4 will have been deleted to maximize the use of RAM. In *Boulton*, to access page 4 from page 350, the reader will have to page back through several hundred pages to get to the desired page. Even if, arguendo, *Boulton* teaches determining which pages to delete based on the distance from the present page, it fails to teach making the determination based on whether the screen is accessible only through other screens.

However, using the method of claim 53, since page 4 is not directly accessible, and is only accessible through other screens, page 4 will be have an indication that it is not to be deleted from memory. Therefore, Applicant challenges the Examiner's statement that *Boulton* discloses the claimed element. No other cited reference cures this deficiency. As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 53, the rejection should be overturned and the claim allowed.

ii. Response to Advisory Action of December 28, 2005

The Advisory Action alleges that "[a]s stated on Page 8 of the previous Office Action, Welsh is used to teach this limitation, not Boulton." See *Advisory Action*, p. 2. However, Applicant respectfully submits that the previous Office Action uses *Boulton* to allegedly teach this limitation. See *Office Action*, pp. 4-5, 9, and 16. Additionally, Examiner has not indicated where the cited limitation is disclosed in *Welsh*. Nevertheless, Applicant respectfully submits

that *Welsh* also fails to disclose the cited element. *Welsh* fails to teach saving a screen to memory based on a determination of whether the screen is accessible only through other screens.

Applicant respectfully submits that, for at least this reason, the sustained rejection of claim 53 is improper and should be overturned.

F. Independent Claim 54

i. Response to Rejection in Final Office Action of December 28, 2005

Specifically, Applicant submits that the following clear legal deficiency exists in the rejection.

Independent claim 54 recites:

54. A system for providing services to guests of a subscriber of an interactive entertainment system, the system comprising:
means for receiving content provided by the interactive entertainment system;
means for distributing the received content to terminals located at the premises of the subscriber;
means for generating screens of information related to services provided by the subscriber of the interactive entertainment system;
means for saving the screens to memory on a terminal located at the premises of a subscriber;
means for determining whether the screen saved into memory is directly accessible or accessible only through other screens;
means for indicating that, if the screen saved into memory is only accessible through other screens, the screen saved into memory is not to be deleted from memory; and
means for receiving a request for a service by a guest.

(Emphasis added). Applicant respectfully submits that claim 54 patently defines over the cited art for at least the reason that the cited art does not disclose the features emphasized above.

Applicant respectfully submits that a claimed element, specifically among others, “means for indicating that, if the screen saved into memory is only accessible through other screens, the screen saved into memory is not to be deleted from memory,” of claim 54 is not taught by the references of record either singularly or in combination. The Office Action alleges that *Boulton* teaches the cited element:

Welsh ... does not teach the memory management method
of determining if a screen is part of a group of screens, and only

saving the group of screens in RAM so that they may be directly accessed instead of continuously downloading the screens from a remote system.

Boulton discloses receiving screen data and continuously updating memory depending on the position of the current page being read, where the memory is capable of storing 10-30 pages that are linked to 3-10 pages that have already been viewed (see Column 7, Lines 8-12), thereby teaching that if the screen of the plurality of screens saved into memory is only accessible through other screens, instructing the terminal to indicate that the screen of the plurality of screens saved into memory is not to be deleted from memory.

See Final Office Action, pp. 4-5.

However, Applicant respectfully submits that *Boulton* **fails** to teach the claimed element.

In *Boulton*, an electronic book publishing method is disclosed.

A number of page equivalents are ... transferred to RAM for presentation to the user. Preferably, the RAM is continually updating depending upon the position in a presentation so that 10-30 page-equivalents of subsequent text are available along with 3-10 pages of text already viewed. A lesser number of pages of additional modalities are stored to maximize the use of RAM. Thus, a user can advance a great distance in the presentation for material already stored in RAM and can backtrack *to some degree* while also being able to switch to different modalities. ***The further a modality is from the current reference, the less likely a switch will be made as quickly, and thus the less need to store as many page equivalents.***

(Emphasis added). See *Boulton*, Col. 7, lines 6-13.

Even if, arguendo, *Boulton* teaches an electronic system that deletes a screen based on a

distance from the present screen, pages are only saved if they are close to the present page. The electronic system disclosed in *Boulton* determines that more recent pages are more likely to be accessed, so it only keeps in RAM those pages likely to be accessed (10-30 page-equivalents of subsequent text are available along with 3-10 pages of text already viewed).

If a reader using the system of *Boulton* is on page 350, for example, and wants to access page 4, the system of *Boulton* will not have indicated that page 4, a page that is not directly accessible, is not to be deleted from memory. According to *Boulton*, when a reader is on page 350, page 4 will have been deleted to maximize the use of RAM. In *Boulton*, to access page 4 from page 350, the reader will have to page back through several hundred pages to get to the desired page. Even if, *arguendo*, *Boulton* teaches determining which pages to delete based on the distance from the present page, it fails to teach making the determination based on whether the screen is accessible only through other screens.

However, using the system of claim 54, since page 4 is not directly accessible, and is only accessible through other screens, page 4 will be have an indication that it is not to be deleted from memory. Therefore, Applicant challenges the Examiner's statement that *Boulton* discloses the claimed element as clear error. No other cited reference cures this deficiency. As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 54, the rejection should be overturned and the claim allowed.

ii. **Response to Advisory Action of December 28, 2005**

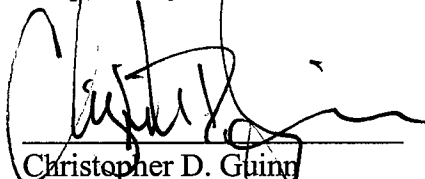
The Advisory Action alleges that "[a]s stated on Page 8 of the previous Office Action, Welsh is used to teach this limitation, not Boulton." See *Advisory Action*, p. 2. However, Applicant respectfully submits that the previous Office Action uses *Boulton* to allegedly teach this limitation. See *Office Action*, pp. 4-5, 9, and 16. Additionally, Examiner has not indicated where the cited limitation is disclosed in *Welsh*. Nevertheless, Applicant respectfully submits that *Welsh* also fails to disclose the cited element. *Welsh* fails to teach saving a screen to memory based on a determination of whether the screen is accessible only through other screens. Applicant respectfully submits that, for at least this reason, the sustained rejection of claim 54 is improper and should be overturned.

CONCLUSION

Based upon the foregoing discussion, Applicants respectfully requests that the Examiner's final rejection of claims 27-54 be overruled by the Board, and that the application be allowed to issue as a patent with all pending claims.

The PTO is authorized to charge the \$500 fee for this Appeal Brief to the credit account identified in the accompanying credit card authorization form. No additional fee is believed to be due in connection with this appeal. If, however, any additional fee is deemed to be payable, you are hereby authorized to charge any such fee to deposit account 20-0778.

Respectfully submitted,



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VIII. CLAIMS - APPENDIX

1. - 26. (Canceled).

27. (Previously Presented) A method for use in an interactive television system, the interactive television system including a system manager coupled to a plurality of subscriber terminals, comprising the steps of:

receiving a first user input at a subscriber terminal indicating a choice for one of a video signal and first operation data, wherein the first operation data includes a plurality of screens;

generating a screen of first operation data responsive to a command, wherein the screen of operation data is generated by a local screen character generator;

saving a screen of the plurality of screens to memory;

determining whether the screen of the plurality of screens saved into memory is directly accessible or accessible only through other screens;

if the screen of the plurality of screens saved into memory is only accessible through other screens, indicating that the screen of the plurality of screens saved into memory is not to be deleted from memory; and

displaying at least one of the video signal and the screen of the first operation data according to the user input, wherein the first operation data is stored in at least one of a screen generator coupled to the system manager and subscriber terminal memory.

28. (Previously Presented) The method of claim 27, wherein the plurality of screens includes a feature start screen and associated screens, wherein upon receiving user input indicating the first operation data and displaying the feature start screen, the subscriber terminal retrieves the associated screens from the system manager and stores the associated screens in the subscriber terminal memory prior to their actual use.

29. (Previously Presented) The method of claim 27, the steps further comprising:
receiving a second user input for one of the associated screens according to a channel map associated with the first operation data;
transmitting the second user input to the system manager;
receiving information from the system manager for updating the associated screen; and
displaying the associated screen including the updated information in accordance with the second user input.
30. (Previously Presented) The method of claim 27, wherein a user continues, via user inputs, an interactive communication with the system manager through the plurality of screens associated with the first operation data where the system manager updates each of the plurality of screens.
31. (Previously Presented) A local environment for providing interactive communications, the local environment comprising:
a system manager for storing information regarding a plurality of clients, each client associated with a terminal located in the local environment;
a local screen generator for generating a screen of information responsive to receiving a command;
memory for saving the screen of information; and
a plurality of terminals coupled to the system manager, each terminal for receiving at least one of a video signal and first operation data, wherein when the first operation data is chosen, the terminal displays a feature start screen and the video signal and stores a plurality of screens associated with the first operation data;
wherein the system manager is configured to save the screen into memory and to determine whether the screen of information is directly accessible or accessible only through other screens; and
wherein the system manager is further configured to indicate that the screen of information saved into memory is not to be deleted from memory if the screen of information saved into memory is only accessible through other screens.

32. (Previously Presented) The local environment of claim 31, wherein, upon client input, the terminal requests information from the system manager and subsequently displays the received information associated with one of the plurality of screens.

33. (Previously Presented) A method of providing services to a patron of a subscriber of an interactive entertainment system, the method comprising the steps of:

generating at the premises of a subscriber a screen of a menu for selecting services, wherein the screen is one of a plurality of screens included in the menu, and wherein the services for selection are offered by at least one of the group consisting of an interactive entertainment system and a subscriber of the interactive entertainment system;

providing a terminal, the terminal adapted to receiver input from a guest and adapted to provide the screen to a display device;

instructing the terminal to save the screen of the plurality of screens to memory;

determining whether the screen of the plurality of screens saved into memory is directly accessible or accessible only through other screens;

if the screen of the plurality of screens saved into memory is only accessible through other screens, instructing the terminal to indicate that the screen of the plurality of screens saved into memory is not to be deleted from memory; and

receiving a selection from a guest.

34. (Previously Presented) The method of claim 33, wherein the screen includes charges owed by the guest.

35. (Previously Presented) The method of claim 34, wherein charges include charges for services offered by the interactive entertainment system.

36. (Previously Presented) The method of claim 34, wherein the subscriber provides room service to guests, and the charges include charges for room services.

37. (Previously Presented) The method of claim 33, wherein the screen is a check-out screen that enables the guest to check-out from the premises of the subscriber using the terminal.
38. (Previously Presented) The method of claim 33, further including the steps of:
providing a system manager, the system manager located at the premises of the subscriber and adapted to control billing of the guest; and
transmitting the screen downstream through a local area network to the terminal.
39. (Previously Presented) The method of claim 33, wherein the screen is generated at the terminal.
40. (Previously Presented) The method of claim 33, further including the steps of:
associating a given screen of the menu with a given television channel; and
outputting the given screen from the terminal such that the screen is displayable on a television tuned to the given television channel.
41. (Previously Presented) The method of claim 40, wherein the screen is for room-service.
42. (Previously Presented) The method of claim 40, wherein the screen is a for in-room checkout.
43. (Previously Presented) The method of claim 40, wherein the screen is for providing information about services offered by the subscriber.

44. (Previously Presented) The method of claim 40, wherein the given screen is a first screen in a sequence of screens for a service, and further including the steps of:
- providing in the given screen instructions for the guest; and
 - receiving input from the guest;
 - responsive to receiving the input from the guest, determining whether a second screen in the sequence of screens is stored in the terminal;
 - responsive to determining the second screen is not stored in the terminal, requesting the second screen from a system manager that is located in the premises of the subscriber;
 - responsive to requesting the second screen, receiving the second screen from the system manager; and
 - outputting the second screen from the terminal such that the second screen is displayable on a television.
45. (Previously Presented) The method of claim 44, further including the step of:
- responsive to determining the second screen is not stored in the terminal, prefetching a third screen from the system manager, wherein the third screen is one of the screens in the sequence of screens.
46. (Previously Presented) The method of claim 33, further including the steps of:
- receiving a video signal;
 - outputting the video signal such that the video signal is displayable on a television;
 - outputting the screen such that the screen is displayable on a television, wherein the screen appears superimposed upon the image created by the video signal.

47. (Previously Presented) A system for providing services to guests of a subscriber of an interactive entertainment system, the system comprising:

means for receiving content provided by the interactive entertainment system;

means for distributing the received content to terminals located at the premises of the subscriber;

means for generating screens of a menu for selecting services, wherein the menu includes a plurality of screens, and the services offered in the menu include services of the interactive entertainment system and services of the subscriber, wherein the screen generating means is located at the premises of the subscriber; and

means for instructing the screen generating means to save a screen of the plurality of screens to memory;

means for determining whether the screen of the plurality of screens saved into memory is directly accessible or accessible only through other screens;

means for instructing the terminal such that, if the screen of the plurality of screens saved into memory is only accessible through other screens, the terminal indicates that the screen of the plurality of screens saved into memory is not to be deleted from memory;

means for receiving a request for a service by a guest; and

means for managing the system, the managing means including means for billing the guest for selected services.

48. (Previously Presented) The system of claim 47, wherein the request receiving means is a terminal, the terminal including the screen generator means.

49. (Previously Presented) The system of claim 48, wherein responsive to receiving the request from the guest, the screen generator means generates a screen of the menu using data stored in a memory of the terminal, the terminal outputs the screen such that the screen is displayable on a television.

50. (Previously Presented) The system of claim 48, wherein responsive to receiving the request from the guest, the terminal determines whether the memory includes data for the screen, and responsive to determining the memory does not include the data, the terminal sends a screen request to the system manager.

51. (Previously Presented) The system of claim 47, wherein the screen generator means generates a room-service screen that enables the guest to order room-service from the subscriber.

52. (Previously Presented) The system of claim 47, wherein the screen generator means generates a room check-out screen that enables the guest to check-out from the premises of the subscriber.

53. (Previously Presented) A method of providing services to guests of a subscriber of an interactive entertainment system, the method comprising the steps of:

providing a plurality of two-way terminals;

generating at the premises of a subscriber a screen for display on a television, wherein the screen relates to information about services provided by the subscriber of the interactive entertainment system;

saving the screen to memory on one of the plurality of two-way terminals;

determining whether the screen saved into memory is directly accessible or accessible only through other screens;

if the screen saved into memory is only accessible through other screens, indicating that the screen of the plurality of screens saved into memory is not to be deleted from memory; and receiving a selection from a guest.

54. (Previously Presented) A system for providing services to guests of a subscriber of an interactive entertainment system, the system comprising:

means for receiving content provided by the interactive entertainment system;

means for distributing the received content to terminals located at the premises of the subscriber;

means for generating screens of information related to services provided by the subscriber of the interactive entertainment system;

means for saving the screens to memory on a terminal located at the premises of a subscriber;

means for determining whether the screen saved into memory is directly accessible or accessible only through other screens;

means for indicating that, if the screen saved into memory is only accessible through other screens, the screen saved into memory is not to be deleted from memory; and

means for receiving a request for a service by a guest.

IX. EVIDENCE - APPENDIX

None.

X. RELATED PROCEEDINGS - APPENDIX

None.